

MJ2409 Applied Energy Technology, Project Course 9.0 credits

Tillämpad energiteknik, projektkurs

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for MJ2409 valid from Autumn 2019

Grading scale

P, F

Education cycle

Second cycle

Main field of study

Mechanical Engineering

Specific prerequisites

MJ2405 "Sustainable Power Generation", 9 credits, or the equivalent MJ2407 "Sustainable Energy Utilisation", 9 credits or the equivalent MJ2411 "Renewable Energy Technology", 6 credits, or the equivalent

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

After passing the course, the student should be able to:

- carry out a systematic and well organised project task, including time planning action plans, meeting agendas, documentation, follow up etc
- analyse and evaluate a technical problem and argue for different technical solutions of the problem
- collect, sort, structure, compile, evaluate and analyse technical and scientific information from databases and other sources
- clearly communicate project results to students, supervisors and clients/employers, both in writing and orally
- apply knowledge that has been acquired from the energy-related advanced courses in the programme

Course contents

Block 1: Introduction and joint lectures: Course introduction, choice of project task, background information on group dynamics, project management and technical communication.

Part 2: Project activities: Organise and define the project, identify tasks, collect information, choose method ensure systematic working method with regular documented project meetings, regular status reports, oral presentations both for fellow students and for clients/employers, final reporting, written and oral.

Course literature

Utdelat material + studenternas egna litteraturstudie

Examination

- PROA Project, 8.0 credits, grading scale: P, F
- SEMA Presentation, 1.0 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

An essential aim of the course is to train/learn work in groups. It is thereby difficult to examine an individual student separate. Depending on reason for earlier failure, examiner can determine about individual examination with alternative assessment method.

Other requirements for final grade

- Attendance at middle and final reviews.
- Active participation in the work of the group throughout the project.
- Active participation in written reporting and oral presentation.
- Submission of protocols from weekly project meetings according to distributed plan.
- Submission of two self-reflection reports where the student reflects on his own contribution to the group's work, group dynamics and work distribution in group.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.